IN THE SPECIFICATION

Please replace paragraph **[0075]** on page 21-22 of the specification, with the following paragraph:

[0075] Figure **21** illustrates the results for specific detection and discrimination of DNA nucleotide substitutions on an ACEA device. The ACEA device is a glass substrate (~ 18 mm by 78 mm) on which 16 electrode structure units were fabricated arranged in a 2 by 8 configuration where the unit-to-unit spacing is 9 mm. Gold (~ 0.2 micron) over Cr (~ 0.03 micron) film was deposited on the glass substrate. The electrode structure unit having a circle-on-a-line electrode geometry (line width 30 micron; circle diameter: 90 micron, line gap: 80 micron) was patterned and fabricated using thin-film photolithography technique (photoresist deposition, mask-covered UV or other light source exposure, photoresist curing, photoresist develop, wet etching of gold metal, removal of remaining gold or other metals). To use the device, a hollow plastic well strip having 16 cylinder shaped, bottomless wells was bonded to the electrode device so that the electrode structure units were exposed to experiment liquid sample when the sample was added to the plastic wells. The sensor area diameter is about 3 mm and the diameter of the plastic wells is about 6.5 mm. Before use, the device surface was treated with 1N HCl for 15 min, followed by rinsing with deionized water. Three oligonucleotide sequences specific for Chlamydia trachomatis 16S ribosome RNA (accession No. D85722) were synthesized for the test. They are (1) a 40 mer 5'end phophothiol-modified capture oligonucleotide sequence ~~(5'-ZZZZGATTTGAGCGTACCAGGTAAAGAAGCACCGGCTAACTCCG)~~ corresponding to nucleotides 481-520 of the Genbank accession no. D85722 sequence, (2) a 20 mer wildtype 5' end biotinylated target sequence ~~(5' bio-CGGTGCTTCTTTACCTGGTA)~~ corresponding to the complement of nucleotides 491-510 of the Genbank accession no. D85722 sequence, and (3) a 20 mer mutant 5'end biotinylated target sequence with a single nucleotide substitution (C to A at the position 9 of (2), equivalent to the complement of nucleotide 502 of the Genbank accession no. D85722 sequence). In this experiment, the capture oligonucleotide was dissolved in deionized water at concentration of 2 μM. A better DNA coating efficiency in 1 M